

EXAMINER'S AMENDMENT

- An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- Authorization for this examiner's amendment was given in a telephone interview with Mr. James A. Flight, Registration number 37,622 on 14 July 2009.
- *The application has been amended as follows:*
- On the first page of the specification, line 3, after, "FIELD OF THE DISCLOSURE", please insert, "This application is a 371 of PCT/US02/39625 filed on 12/11/2002".
- Claim 1, before, "detecting", please insert, "automatically".
- Claim 1, line 7, after, "image", please add, ",wherein determining the number of people within the at least one image comprises: (a) determining

at least one difference image based on at least two captured images; (b) developing at least one shape from the at least one difference image; (c) identifying at least one center of the at least one shape; (d) adding a symbol having a predetermined size and indicative of the at least one center of the at least one shape to a histogram; (e) repeating (a)-(d); and (f) if any symbol in the histogram grows beyond a predetermined threshold, counting that symbol as a person.”.

➤ Claim 24, line 12, after, “members”, please add, “, wherein the processor determines the number of people within the at least one image by: (a) determining at least one difference image between at least two images captured by the camera; (b) developing at least one shape from the at least one difference image; (c) identifying at least one center of the at least one shape; (d) adding a symbol having a predetermined size and indicative of the at least one center of the at least one shape to a histogram; (e) repeating (a)-(d); and (f) if any symbol in the histogram grows beyond a predetermined threshold, counting the symbol as a person.”.

➤ Claim 37, line 6, after, “image”, please add, “, wherein the at least one computer determines the number of people within the at least one image by: (a) determining at least one difference image between at least two captured images; (b) developing at least one shape from the at least one difference image; (c) identifying at least one center of the at least one

shape; (d) adding a symbol having a predetermined size and indicative of the at least one center of the at least one shape to a histogram; (e) repeating (a)-(d); and (f) if any symbol in the histogram grows beyond a predetermined threshold, counting the symbol as a person.”.

- Claims 3, 27, 38 and 48-67 are canceled.
- Claim 4, line 1, please change, “claim 3”, to read, “claim 1”.
- Claim 7, line 1, please change, “claim 3”, to read, “claim 1”.
- Claim 10, line 1, please change, “claim 3”, to read, “claim 1”.
- Claim 12, line 1, please change, “claim 3”, to read, “claim 1”.
- Claim 13, line 1, please change, “claim 3”, to read, “claim 1”.
- Claim 14, line 1, please change, “claim 3”, to read, “claim 1”.
- Claim 37, lines 1-2, please change, “A machine readable medium storing machine readable instructions which, when executed, cause at least one machine to:”, to read, “A computer readable medium storing computer readable instructions which, when executed, cause at least one computer to:”.
- Claim 39, lines 1-5, please change, “A machine readable medium as defined in claim 37 wherein, if a number of members identified by the audience is different from the determined number of people after a predetermined number of prompts of the audience, the machine readable instructions cause the at least one machine to adjust a value to avoid excessive prompting of the audience.”, to read, “A computer readable

medium as defined in claim 37 wherein, if a number of members identified by the audience is different from the determined number of people after a predetermined number of prompts of the audience, the computer readable instructions cause the at least one computer to adjust a value to avoid excessive prompting of the audience.”.

- Claim 40, lines 1-4, please change, “A machine readable medium as defined in claim 39 wherein the at least one machine adjusts the value by increasing a previous audience count by a difference between the number of members identified by the audience and the number of people determined from the at least one image.”, to read, “A computer readable medium as defined in claim 39 wherein the at least one computer adjusts the value by increasing a previous audience count by a difference between the number of members identified by the audience and the number of people determined from the at least one image.”.
- Claim 41, lines 1-5, please change, “A machine readable medium as defined in claim 40 wherein the machine readable instructions cause the at least one machine to record the difference between the number of members identified by the audience and the number of people determined from the at least one image as a number of unidentified audience members.”, to read, “A computer readable medium as defined in claim 40 wherein the computer readable instructions cause the at least one computer to record the difference between the number of members

identified by the audience and the number of people determined from the at least one image as a number of unidentified audience members.”.

- Claim 42, lines 1-4, please change, “A machine readable medium as defined in claim 37 wherein the machine readable instructions cause the at least one machine to periodically export recorded data to a device to identify audiences and programs being consumed by the audiences.”, to read, “A computer readable medium as defined in claim 37 wherein the computer readable instructions cause the at least one computer to periodically export recorded data to a device to identify audiences and programs being consumed by the audiences.”.
- Claim 43, lines 1-3, please change, “A machine readable medium as defined in claim 37 wherein the machine readable instructions cause the at least one machine to identify the program being consumed by the audience.”, to read, “A computer readable medium as defined in claim 37 wherein the computer readable instructions cause the at least one computer to identify the program being consumed by the audience.”.
- Claim 44, line 1, please change, “A machine readable”, to read, “A computer readable”.
- Claim 45, lines 1-3, please change, “A machine readable medium as defined in claim 44 wherein the machine readable instructions cause the at least one machine to record the source and the consumption time.”, to read, “A computer readable medium as defined in claim 44 wherein the

computer readable instructions cause the at least one computer to record the source and the consumption time.”.

- Claim 46, line 1, please change, “A machine readable”, to read, “A computer readable”.

REASONS FOR ALLOWANCE

➤ The following is an examiner's statement of reasons for allowance: The present invention is directed towards a method and apparatus of detecting a composition of an audience of an information presenting device. The closest prior art, Lu et al. (USPN 5,771,307), shows a similar system, in which, in a passive identification apparatus for identifying a predetermined individual member of a television viewing audience in a monitored viewing area, a video image of a monitored viewing area is captured, wherein a template matching score is provided for an object in the video image. A Eigenface recognition score is provided for an object in the video image. These scores may be provided by comparing objects in the video image to reference files. The template matching score and the Eigenface recognition score are fused to form a composite identification record from which a viewer may be identified. Body shape matching, viewer tracking, viewer sensing, and/or historical data may be used to assist in viewer identification. However, Lu et al. fail to address: “for prompting the audience to identify its members if a change in the number of people is detected based on the number of people determined to be within the at least one image, wherein determining the number of people within the at least one image

comprises: (a) determining at least one difference image based on at least two captured images; (b) developing at least one shape from the at least one difference image; (c) identifying at least one center of the at least one shape; (d) adding a symbol having a predetermined size and indicative of the at least one center of the at least one shape to a histogram; (e) repeating (a)-(d); and (f) if any symbol in the histogram grows beyond a predetermined threshold, counting that symbol as a person". These distinct features have been added to each independent claim and renders them allowable.

- Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386. The examiner can normally be reached on Mon-Friday. 8:30 am thru 5:00pm.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.
- Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amir Alavi/
Primary Examiner, Art Unit 2624
14 July 2009